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Tapp

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(54) **WATER TROUGH WINDOW SEAL ASSEMBLY**

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E06B 7/14 (2006.01)
E06B 1/62 (2006.01)

(52) **U.S. Cl.**
CPC ***E06B 7/14*** (2013.01); ***E06B 1/62*** (2013.01); *E06B 2001/628* (2013.01)

(58) **Field of Classification Search**
CPC E06B 7/14; E06B 1/62; E06B 2001/628
USPC 52/58, 741.4, 288.1, 381, 443
See application file for complete search history.

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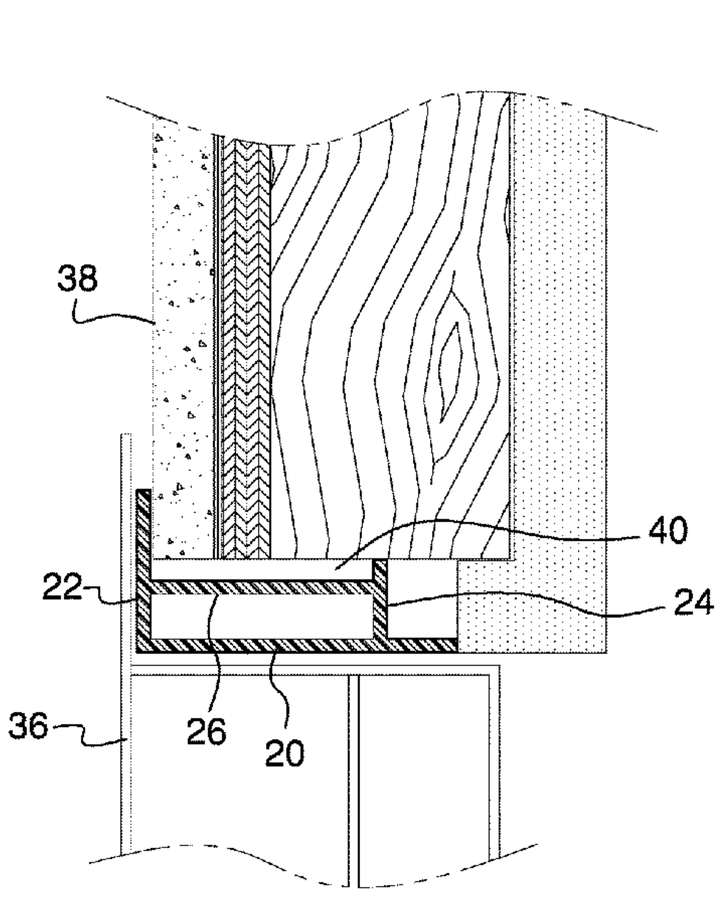
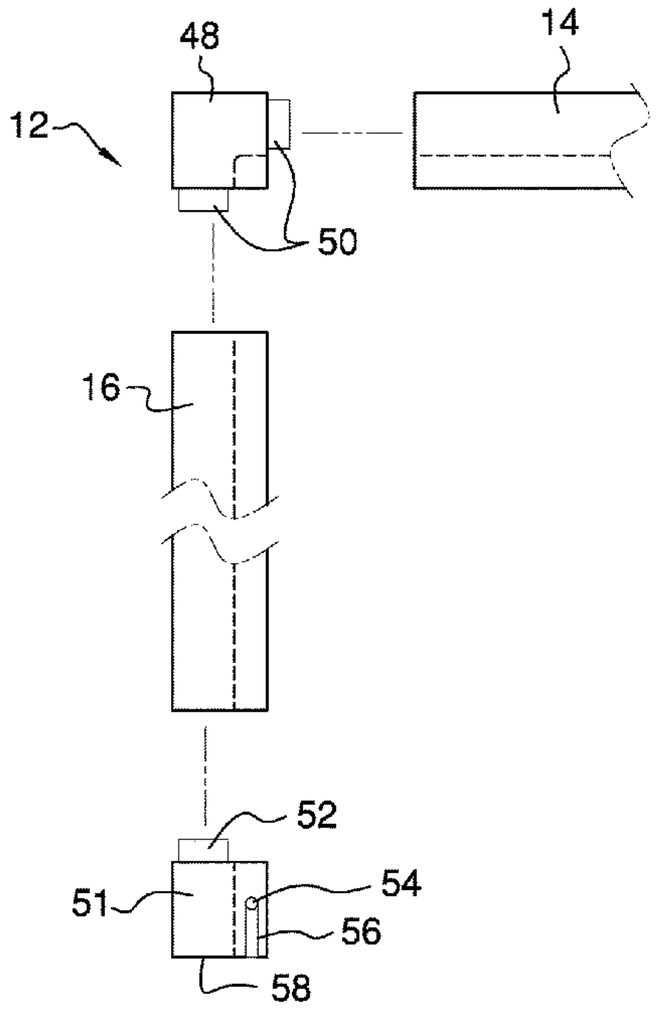
Primary Examiner — Joshua K Ihezie

(57) **ABSTRACT**

A water trough window seal trim assembly for preventing water leakage includes a plurality of trim sections comprising a top trim section, a left trim section, and a right trim section. Each of the plurality of trim sections comprises a bottom piece, an exterior perpendicular piece, an interior perpendicular piece, and a parallel piece. The bottom piece has an exterior end, an interior end, a top face, and a bottom face. The exterior perpendicular piece is perpendicularly coupled to the top face at the exterior end. The interior perpendicular piece is perpendicularly coupled to the top face proximal the interior end. The parallel piece is perpendicularly coupled to each of the exterior perpendicular piece and the interior perpendicular piece to form a water trough. A pair of corner connectors perpendicularly couples each of the left trim section and the right trim section to the top trim section.

7 Claims, 5 Drawing Sheets





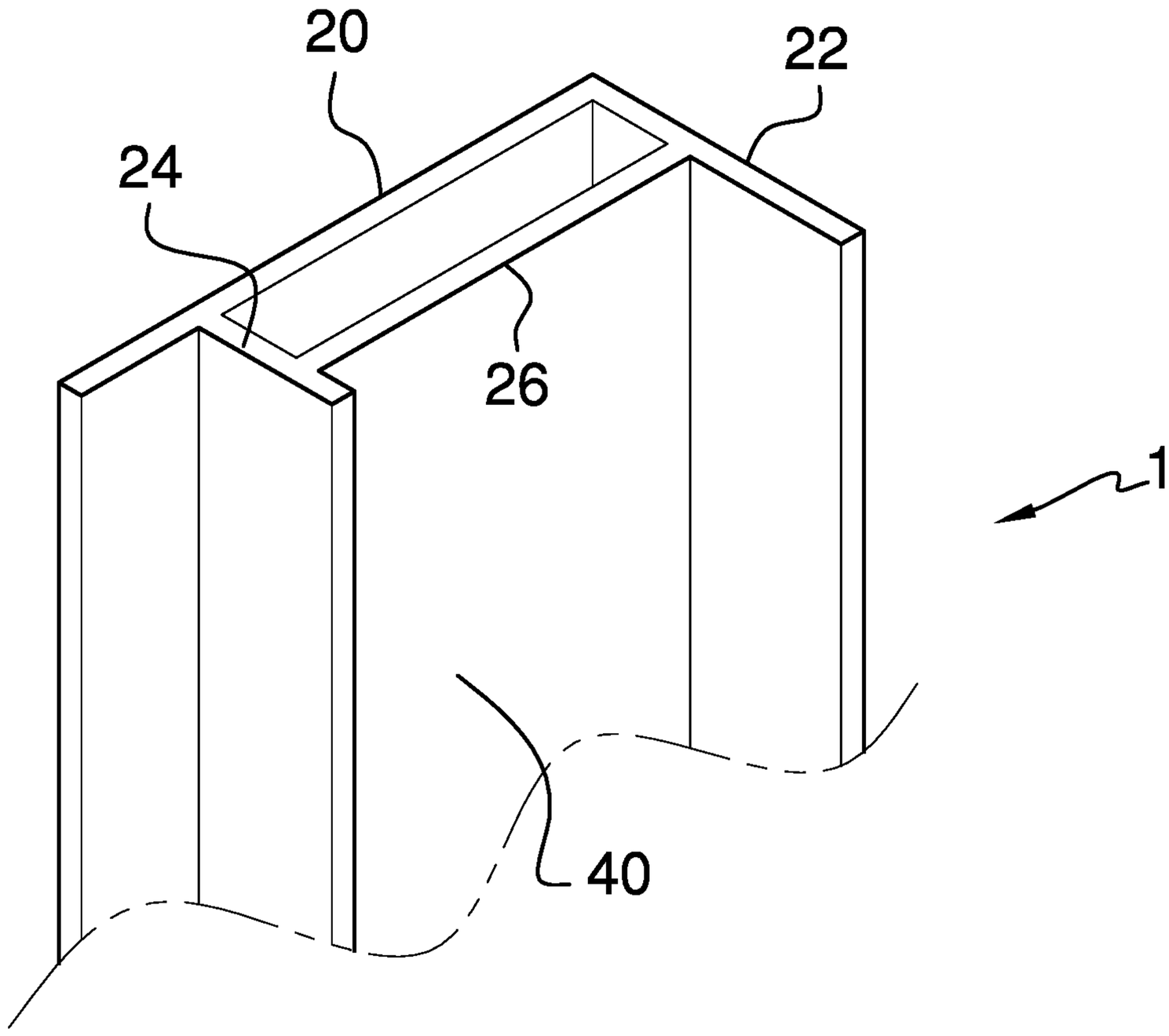


FIG. 1

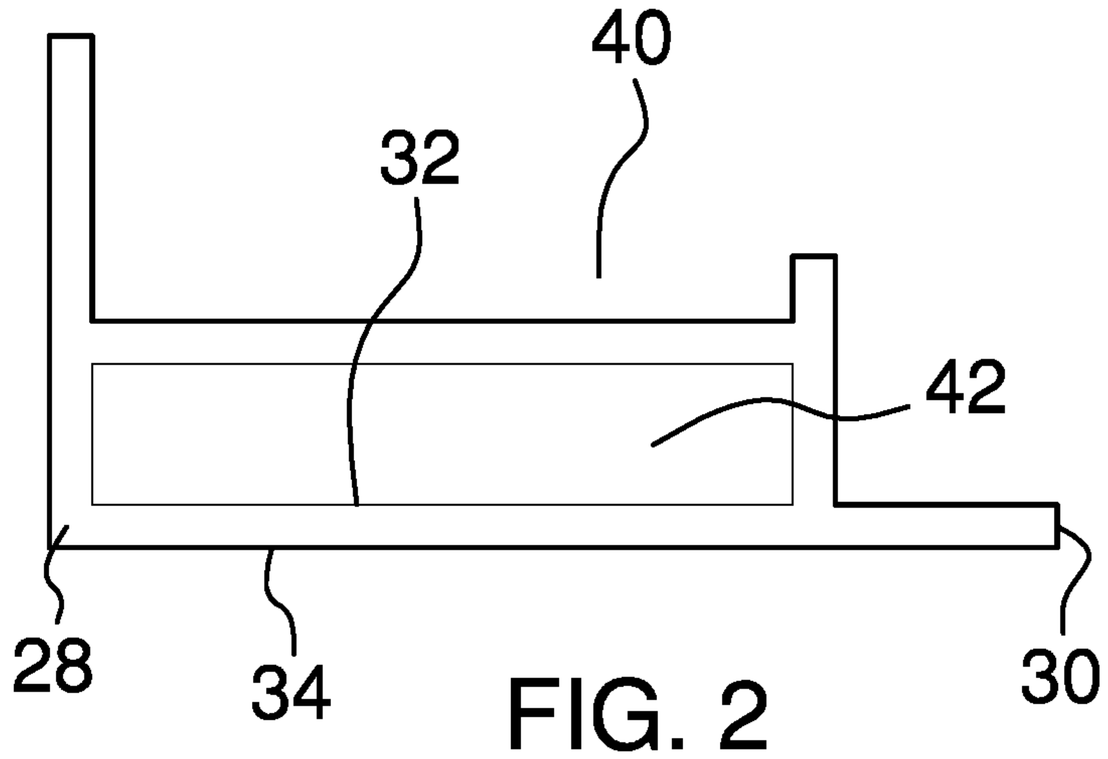


FIG. 2

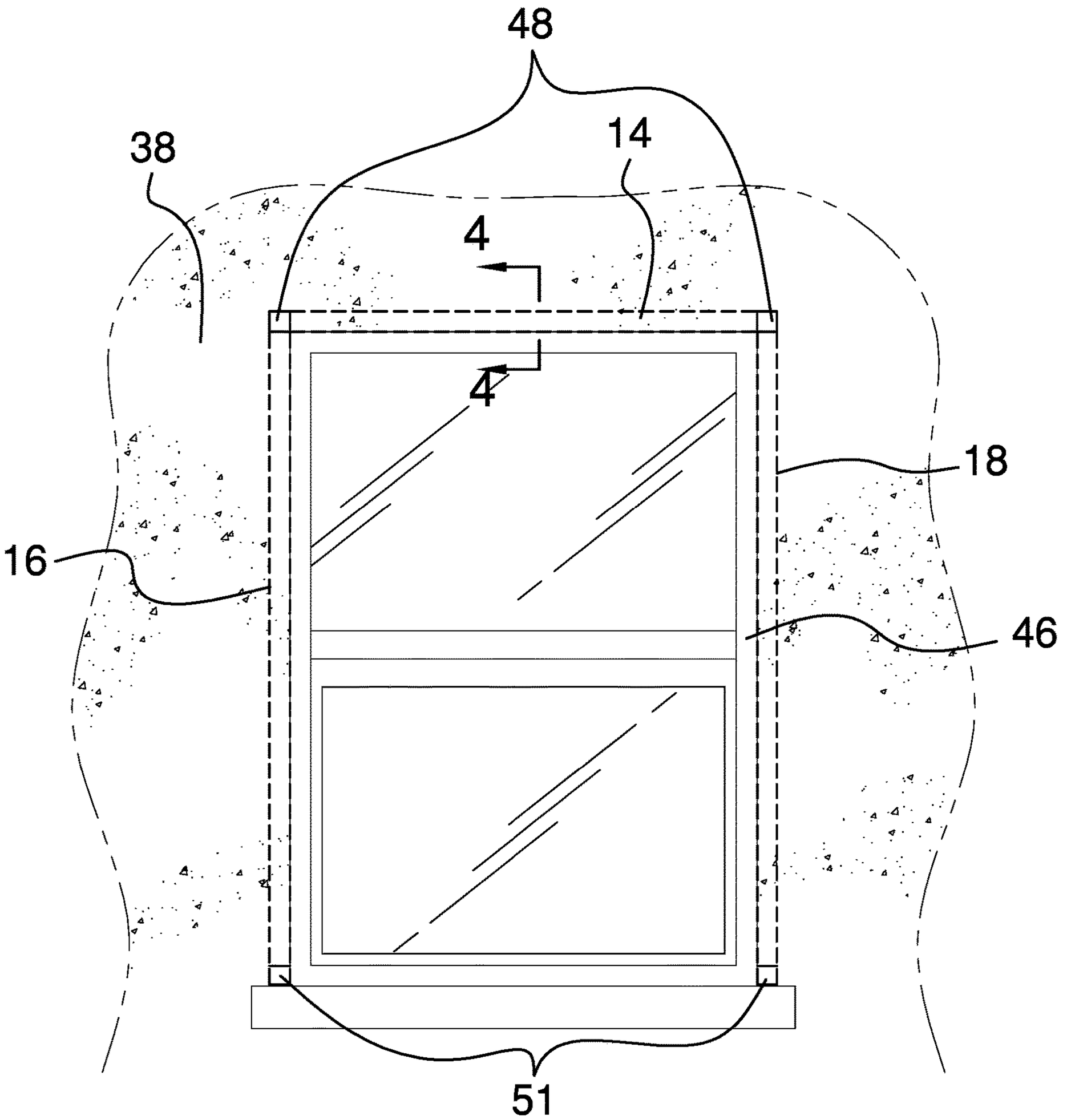


FIG. 3

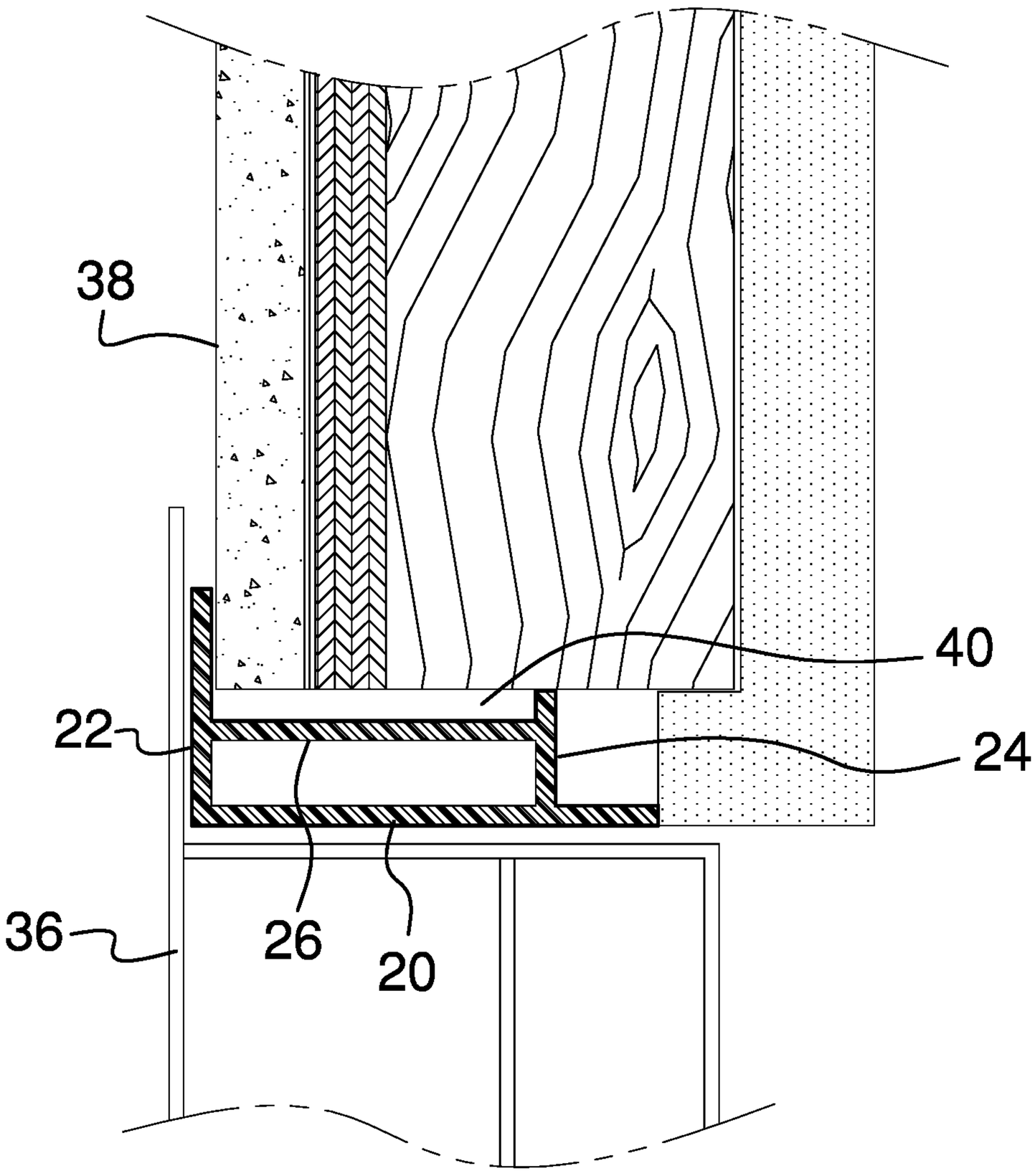


FIG. 4

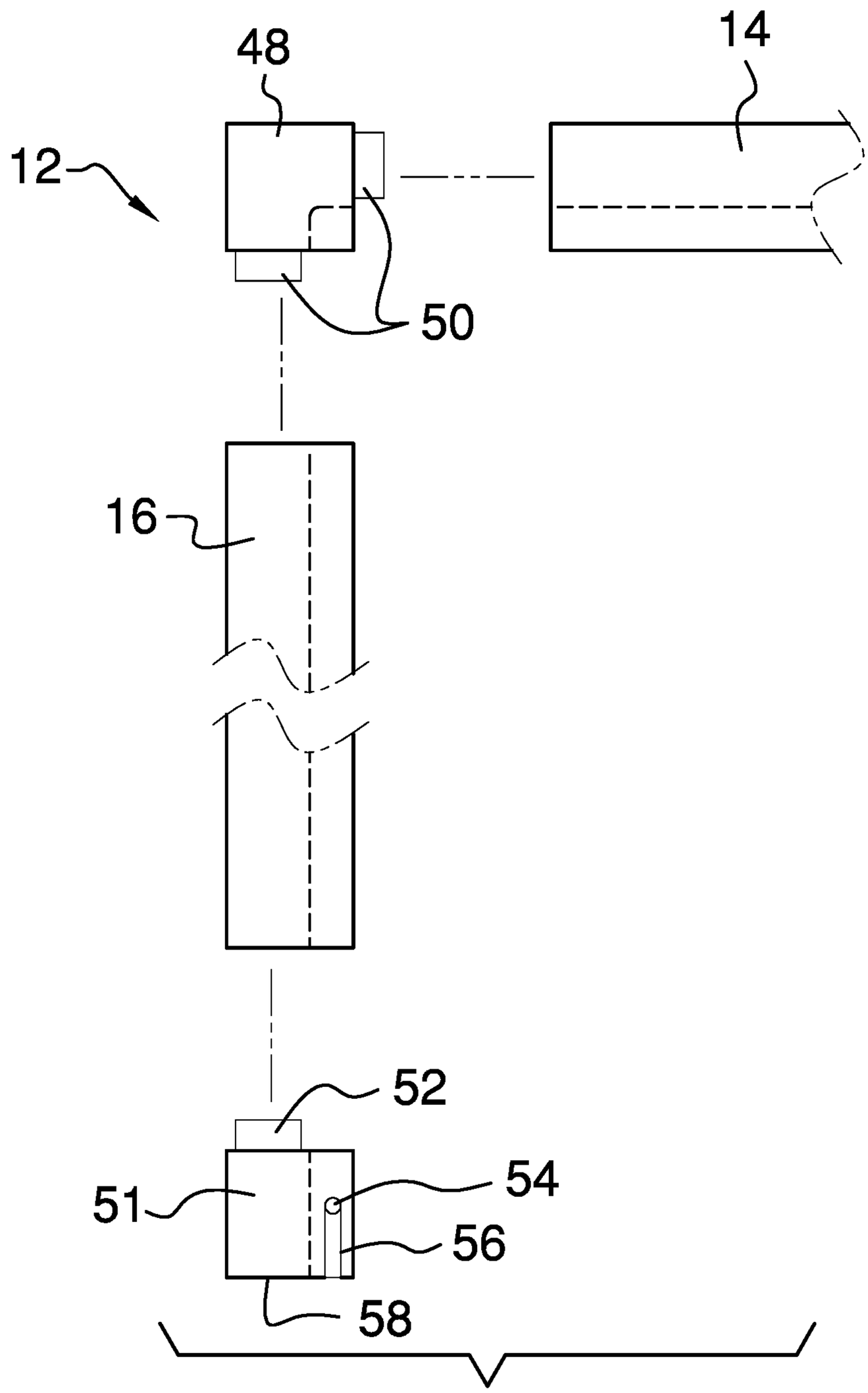


FIG. 5

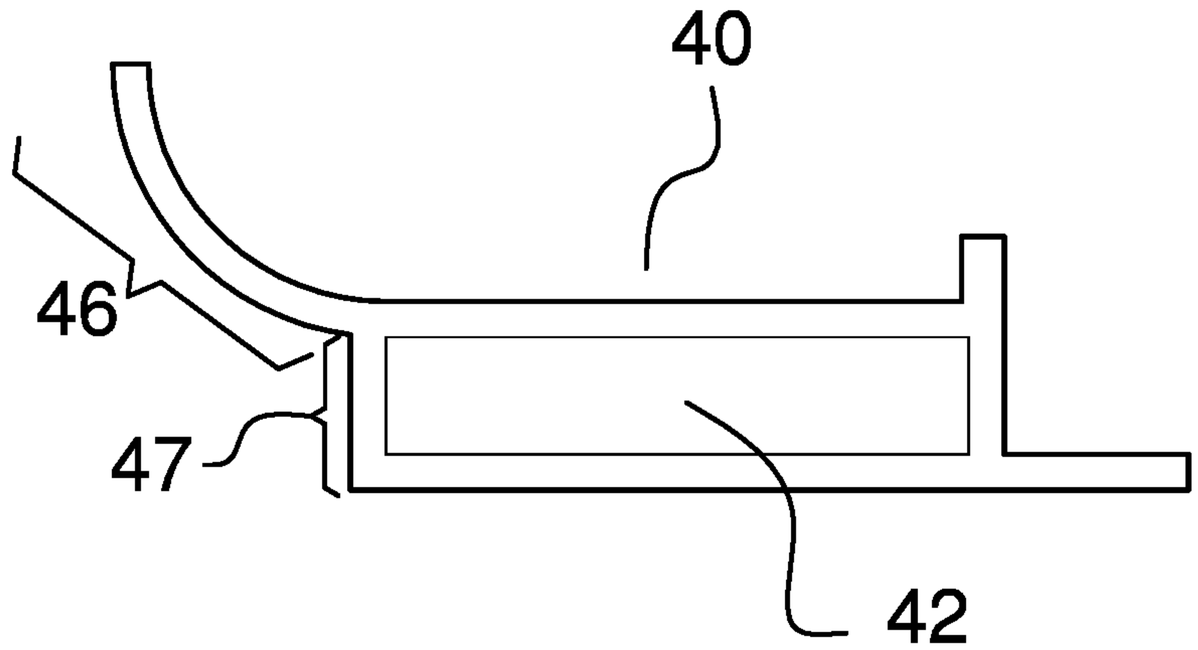


FIG. 6

WATER TROUGH WINDOW SEAL ASSEMBLY

CROSS-REFERENCE TO RELATED APPLICATIONS

Not Applicable

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

Not Applicable

THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT Not Applicable

INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC OR AS A TEXT FILE VIA THE OFFICE ELECTRONIC FILING SYSTEM

Not Applicable

STATEMENT REGARDING PRIOR DISCLOSURES BY THE INVENTOR OR JOINT INVENTOR

Not Applicable

BACKGROUND OF THE INVENTION

(1) Field of the Invention

(2) Description of Related Art Including Information Disclosed Under 37 CFR 1.97 and 1.98

The disclosure and prior art relates to window trims and more particularly pertains to a new window trim for preventing water leakage.

BRIEF SUMMARY OF THE INVENTION

An embodiment of the disclosure meets the needs presented above by generally comprising a plurality of trim sections comprising a top trim section, a left trim section, and a right trim section. Each of the plurality of trim sections comprises a bottom piece, an exterior perpendicular piece, an interior perpendicular piece, and a parallel piece. The bottom piece has an exterior end, an interior end, a top face, and a bottom face. The exterior perpendicular piece is perpendicularly coupled to the top face at the exterior end and is configured to be disposed between a window frame and an outer wall. The interior perpendicular piece is perpendicularly coupled to the top face proximal the interior end. The parallel piece is perpendicularly coupled to each of the exterior perpendicular piece and the interior perpendicular piece and is thus parallel to the bottom piece. The parallel piece forms a water trough between the exterior perpendicular piece and the interior perpendicular piece. The bottom piece, the exterior perpendicular piece, the interior perpendicular piece, and the parallel piece form a rectangular channel. A pair of corner connectors perpendicularly couples each of the left trim section and the right trim section to the top trim section.

There has thus been outlined, rather broadly, the more important features of the disclosure in order that the detailed description thereof that follows may be better understood, and in order that the present contribution to the art may be better appreciated. There are additional features of the disclosure that will be described hereinafter and which will form the subject matter of the claims appended hereto.

The objects of the disclosure, along with the various features of novelty which characterize the disclosure, are pointed out with particularity in the claims annexed to and forming a part of this disclosure.

BRIEF DESCRIPTION OF SEVERAL VIEWS OF THE DRAWING(S)

The disclosure will be better understood and objects other than those set forth above will become apparent when consideration is given to the following detailed description thereof. Such description makes reference to the annexed drawings wherein:

FIG. **1** is an isometric view of a water trough window seal trim assembly according to an embodiment of the disclosure.

FIG. **2** is a bottom plan view of an embodiment of the disclosure.

FIG. **3** is an in-use view of an embodiment of the disclosure.

FIG. **4** is a cross-sectional view of an embodiment of the disclosure along line **4-4** of FIG. **3**.

FIG. **5** is an exploded view of an embodiment of the disclosure.

FIG. **6** is a bottom plan view of an embodiment of the disclosure.

DETAILED DESCRIPTION OF THE INVENTION

With reference now to the drawings, and in particular to FIGS. **1** through **6** thereof, a new window trim embodying the principles and concepts of an embodiment of the disclosure and generally designated by the reference numeral **10** will be described.

As best illustrated in FIGS. **1** through **6**, the water trough window seal trim assembly **10** generally comprises a plurality of trim sections **12** comprising a top trim section **14**, a left trim section **16**, and a right trim section **18**. Each of the plurality of trim sections **12** comprises a bottom piece **20**, an exterior perpendicular piece **22**, an interior perpendicular piece **24**, and a parallel piece **26**. The bottom piece **20** has an exterior end **28**, an interior end **30**, a top face **32**, and a bottom face **34**. The exterior perpendicular piece **22** is perpendicularly coupled to the top face **32** at the exterior end **28**. The exterior perpendicular piece **22** is configured to be disposed between a window frame **36** and an outer wall **38**. The interior perpendicular piece **24** is perpendicularly coupled to the top face **32** proximal the interior end **30**. The parallel piece **26** is perpendicularly coupled to each of the exterior perpendicular piece **22** and the interior perpendicular piece **24**. The parallel piece **26** is thus parallel to the bottom piece **20** and forms a water trough **40** between the exterior perpendicular piece **22** and the interior perpendicular piece **24**. The bottom piece **20**, the exterior perpendicular piece **22**, the interior perpendicular piece **24**, and the parallel piece **26** form a rectangular channel **42**. The exterior perpendicular piece **22** may have a straight section **44** extending from the bottom piece **20** to the parallel piece **26** and a curved section **46** extending above the parallel piece **26**. The curved section **46** is concave relative the parallel piece **26** and is configured to fit the outer wall **38** when it is rounded.

A pair of corner connectors **48** perpendicularly couples each of the left trim section **16** and the right trim section **18** to the top trim section **14**. Each of the pair of corner connectors **48** may have a pair of extensions **50**. Each of the pair of extensions **50** is selectively engageable with the rectangular channel **42**. There may also be an end trim section **51** having a tongue **52**. The tongue **52** is selectively engageable with the rectangular channel **42** of either the left trim section **16** or the right trim section **18**. The end trim section **51** may have a drain aperture **54** and a drain channel **56**. The drain aperture **54** is in fluid communication with the water trough **40** and the drain channel **56** extends from the drain aperture to a bottom edge **58** of the end trim section.

In use, the plurality of trim sections **12** joined by the pair of corner connectors **48** is installed around the window frame **36**. Water that runs down the outer wall **38** and gets behind the exterior perpendicular piece **22** enters the water trough **40**. The water then flows down the water trough of the left trim section **16** and the right trim section **18**, and if present through the drain aperture **56** of the end trim section and down the drain channel **56**.

With respect to the above description then, it is to be realized that the optimum dimensional relationships for the parts of an embodiment enabled by the disclosure, to include variations in size, materials, shape, form, function and manner of operation, assembly and use, are deemed readily apparent and obvious to one skilled in the art, and all equivalent relationships to those illustrated in the drawings and described in the specification are intended to be encompassed by an embodiment of the disclosure.

Therefore, the foregoing is considered as illustrative only of the principles of the disclosure. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the disclosure to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the disclosure. In this patent document, the word "comprising" is used in its non-limiting sense to mean that items following the word are included, but items not specifically mentioned are not excluded. A reference to an element by the indefinite article "a" does not exclude the possibility that more than one of the element is present, unless the context clearly requires that there be only one of the elements.

I claim:

1. A water trough window seal trim assembly comprising:

a plurality of trim sections, the plurality of trim sections comprising a top trim section, a left trim section, and a right trim section, each of the plurality of trim sections comprising:

a bottom piece, the bottom piece having an exterior end, an interior end, a top face, and a bottom face;

an exterior perpendicular piece coupled to the bottom piece, the exterior perpendicular piece being perpendicularly coupled to the top face at the exterior end, the exterior perpendicular piece being configured to be disposed between a window frame and an outer wall;

an interior perpendicular piece coupled to the bottom piece, the interior perpendicular piece being perpendicularly coupled to the top face proximal the interior end; and

a parallel piece coupled to each of the exterior perpendicular piece and the interior perpendicular piece, the parallel piece being perpendicularly coupled to each of the exterior perpendicular piece and the interior perpendicular piece, the parallel piece thus being parallel to the bottom piece, the parallel piece forming a water trough between the exterior perpendicular piece and the interior perpendicular piece;

wherein the bottom piece, the exterior perpendicular piece, the interior perpendicular piece, and the parallel piece form a rectangular channel;

a pair of corner connectors, each of the pair of corner connectors perpendicularly coupling each of the left trim section and the right trim section to the top trim section; and

an end trim section, the end trim section being selectively engageable with either the left trim section or the right trim section, the end trim section having a drain aperture, the drain aperture being in fluid communication with the water trough.

2. The water trough window seal trim assembly of claim **1** further comprising each of the pair of corner connectors having a pair of extensions, each of the pair of extensions being selectively engageable with the rectangular channel.

3. The water trough window seal trim assembly of claim **1** further comprising the end trim section having a tongue, the tongue being selectively engageable with the rectangular channel.

4. The water trough window seal trim assembly of claim **3** further comprising the end trim section having a drain channel, the drain channel extending from the drain aperture to a bottom edge of the end trim section.

5. The water trough window seal trim assembly of claim **1** further comprising the exterior perpendicular piece having a straight section and a curved section, the straight section extending from the bottom piece to the parallel piece, the curved section being concave relative to the parallel piece.

6. A water trough window seal trim assembly comprising:

a plurality of trim sections, the plurality of trim sections comprising a top trim section, a left trim section, and a right trim section, each of the plurality of trim sections comprising:

a bottom piece, the bottom piece having an exterior end, an interior end, a top face, and a bottom face;

an exterior perpendicular piece coupled to the bottom piece, the exterior perpendicular piece being perpendicularly coupled to the top face at the exterior end, the exterior perpendicular piece being configured to be disposed between a window frame and an outer wall;

an interior perpendicular piece coupled to the bottom piece, the interior perpendicular piece being perpendicularly coupled to the top face proximal the interior end; and

a parallel piece coupled to each of the exterior perpendicular piece and the interior perpendicular piece, the parallel piece being perpendicularly coupled to each of the exterior perpendicular piece and the interior perpendicular piece, the parallel piece thus being parallel to the bottom piece, the parallel piece forming a water trough between the exterior perpendicular piece and the interior perpendicular piece;

wherein the bottom piece, the exterior perpendicular piece, the interior perpendicular piece, and the parallel piece form a rectangular channel;

a pair of corner connectors, each of the pair of corner connectors having a pair of extensions, each of the pair of extensions being selectively engageable with the rectangular channel, each of the pair of corner connectors perpendicularly coupling each of the left trim section and the right trim section to the top trim section; and

an end trim section, the end trim section having a tongue, the tongue being selectively engageable with the rectangular channel, the end trim section being selectively engageable with either the left trim section or the right trim section, the end trim section having a drain aperture and a drain channel, the drain aperture being in fluid communication with the water trough, the drain channel extending from the drain aperture to a bottom edge of the end trim section.

7. A water trough window seal trim assembly comprising:

a plurality of trim sections, the plurality of trim sections comprising a top trim section, a left trim section, and a right trim section, each of the plurality of trim sections comprising:

a bottom piece, the bottom piece having an exterior end, an interior end, a top face, and a bottom face;

an exterior perpendicular piece coupled to the bottom piece, the exterior perpendicular piece being perpendicularly coupled to the top face at the exterior end, the exterior perpendicular piece having a straight section and a curved section, the exterior perpendicular piece being configured to be disposed between a window frame and an outer wall;

an interior perpendicular piece coupled to the bottom piece, the interior perpendicular piece being perpendicularly coupled to the top face proximal the interior end; and

a parallel piece coupled to each of the exterior perpendicular piece and the interior perpendicular piece, the parallel piece being perpendicularly coupled to each of the exterior perpendicular piece and the interior perpendicular piece, the parallel piece being coupled between the straight section and the curved section of the exterior perpendicular piece, the parallel piece thus being parallel to the bottom piece, the parallel piece forming a water trough between the exterior perpendicular piece and the interior perpendicular piece;

wherein the bottom piece, the exterior perpendicular piece, the interior perpendicular piece, and the parallel piece form a rectangular channel;

a pair of corner connectors, each of the pair of corner connectors having a pair of extensions, each of the pair of extensions being selectively engageable with the rectangular channel, each of the pair of corner connectors perpendicularly coupling each of the left trim section and the right trim section to the top trim section; and

an end trim section, the end trim section having a tongue, the tongue being selectively engageable with the rectangular channel, the end trim section being selectively engageable with either the left trim section or the right trim section, the end trim section having a drain aperture and a drain channel, the drain aperture being in fluid communication with the water trough, the drain channel extending from the drain aperture to a bottom edge of the end trim section.

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